CLAIMS

1. A system comprising:

an event prediction module operably associated with multiple media content samples that are to be rendered for a user, the module being configured to:

receive event notification requests from an application pertaining to events associated with the media content samples; and

predict rendition times associated with the individual events.

2. The system of claim 1, wherein the event prediction module comprises an event list that stores information associated with events and associated event rendition times.

3. The system of claim 1, wherein the event prediction module is configured to:

generate event notifications in accordance with their predicted rendition times; and

send the notifications to an application.

4. The system of claim 1, wherein the event prediction module predicts the rendition times by taking into account one or more presentation rates that define a rate at which individual media content samples are to be rendered.

5. The system of claim 1, wherein the event prediction module predicts the rendition times by performing linear interpolation.

6. A system comprising:

multiple filters defining a filter graph that is configured to process multiple media content samples, the filter graph comprising one or more render filters for rendering media content samples; and

an event prediction module operably associated with the filter graph, the module being configured to:

receive event notification requests from an application pertaining to events associated with the media content samples; and

predict rendition times associated with the individual events.

7. The system of claim 6, wherein the event prediction module is independent of any of the render filters.

8. The system of claim 6, wherein the event prediction module is located upstream of any of the render filters.

9. The system of claim 6, wherein the event prediction module comprises part of a filter upstream of any of the render filters.

10. The system of claim 6, wherein the event prediction module comprises part of the application.

11. The system of claim 6, wherein the event prediction module is configured to generate event notifications in accordance with the predicted rendition times, and send the notifications to an application, the event prediction module being located so that the notifications are not back propagated through multiple filters of the filter graph.

12. A system comprising:

multiple filters defining a filter graph that is configured to process multiple media content samples;

the filter graph comprising:

one or more render filters for rendering media content samples; and

a source filter for receiving media content from a media source;

the source filter comprising an event prediction module configured to:

receive event notification requests from an application pertaining to events associated with the media content samples; and

predict rendition times associated with the individual events.

13. The system of claim 12, wherein the event prediction module comprises an event list that stores events and their associated rendition times.

14. The system of claim 12, wherein the event prediction module is configured to:

generate event notifications in accordance with the predicted rendition times; and

send the notifications to the application.

15. The system of claim 12, wherein the event prediction module predicts the rendition times by taking into account one or more presentation rates that define a rate at which individual data samples are to be rendered.

16. The system of claim 12, wherein the event prediction module predicts the rendition times by performing linear interpolation.

17. A method comprising:

receiving an event notification request from an application, the event notification request requesting a notification pertaining to events associated with one or more media content samples that are to be rendered; and

predicting rendition times associated with the individual events.

18. The method of claim 17 further comprising storing information associated with events and associated event rendition times in an event list.

19. The method of claim 17 further comprising sending at least one event notification to the application responsive to an associated event having been predicted to occur at a particular rendition time.

20. The method of claim 17, wherein the act of predicting is accomplished, at least in part, by taking into account one or more presentation rates at which individual content samples are to be rendered.

21. The method of claim 17, wherein the act of predicting is accomplished, at least in part, by performing at least one linear interpolation operation.

22. One or more computer-readable media having computer-readable instructions thereon which, when executed by one or more processors, cause the one or more processors to:

receive an event notification request from an application, the event notification request requesting a notification pertaining to events associated with one or more media content samples that are to be rendered;

predict rendition times associated with the individual events; and

send at least one event notification to the application responsive to an associated event having been predicted to occur at a particular rendition time.

23. The computer-readable media of claim 22, wherein the computer-readable instructions cause the one or more processors to predict rendition times by taking into account one or more presentation rates at which individual content samples are to be rendered.

24. The computer-readable media of claim 22, wherein the computer-readable instructions cause the one or more processors to predict rendition times by performing at least one linear interpolation operation.

25. A method comprising:

providing multiple filters defining a filter graph that is configured to process multiple media content samples, the filter graph comprising one or more render filters for rendering media content samples;

receiving event notification requests from an application pertaining to events associated with the media content samples; and

predicting rendition times associated with the individual events.

26. The method of claim 25, wherein the act of predicting is performed independent of any information provided by said one or more render filters.

27. The method of claim 25, wherein event notification requests are not provided to the one or more render filters.

28. The method of claim 25, wherein the act of receiving is performed by a filter upstream of the one or more render filters.

29. The method of claim 25, wherein the act of receiving is accomplished upstream of the one or more render filters.

30. One or more computer-readable media having computer-readable instructions thereon which, when executed by one or more processors, cause the one or more processors to:

provide multiple filters defining a filter graph that is configured to process multiple media content samples, the filter graph comprising one or more render filters for rendering media content samples;

receive event notification requests from an application pertaining to events associated with the media content samples; and

predict rendition times associated with the individual events.

31. The computer-readable media of claim 30, wherein the computer-readable instructions cause the one or more processors to predict rendition times independent of any information provided by said one or more render filters.

32. A method comprising:

providing multiple filters defining a filter graph that is configured to process multiple media content samples, the filter graph comprising one or more render filters for rendering media content samples;

receiving event notification requests from an application pertaining to events associated with the media content samples;

predicting rendition times associated with individual events; and

sending event notifications to the application responsive to an associated event having been predicted to occur at a particular rendition time.

33. The method of claim 32, wherein said act of predicting is performed independent of any information provided by said one or more render filters.

34. The method of claim 33, wherein said act of sending is performed independent of an associated event actually occurring.

35. The method of claim 32, wherein said event notification requests are not provided to the one or more render filters.

36. The method of claim 35, wherein said act of sending does not originate at any of the render filters.

37. The method of claim 32, wherein said act of receiving is performed by a filter upstream of the one or more render filters.

38. The method of claim 37, wherein said act of sending is performed by said upstream filter.

39. The method of claim 32, wherein said receiving is accomplished upstream of the one or more render filters.

40. The method of claim 39, wherein said act of sending originates and is performed upstream of said one or more render filters.

41. A method comprising:

providing multiple filters defining a filter graph that is configured to process multiple media content samples, the filter graph comprising one or more render filters for rendering media content samples and a source filter for receiving media content from a media source, the source filter comprising an event prediction module;

receiving event notification requests from an application pertaining to events associated with the media content samples;

predicting, with the event prediction module, rendition times associated with individual events; and

sending event notifications to the application responsive to an associated event having been predicted to occur at a particular rendition time.

42. The method of claim 41, wherein said act of predicting is accomplished by taking into account one or more presentation rates that define a rate at which individual samples are rendered.